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## NOTICE OF ALLOWANCE AND FEE(S) DUE

24247 7590 06/09/2008

TRASK BRITT  
P.O. BOX 2550  
SALT LAKE CITY, UT 84110

EXAMINER

SMITH, RICHARD A

ART UNIT

PAPER NUMBER

2841

DATE MAILED: 06/09/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,041	10/21/2005	Tatiana Maciulis Dip	3129-7506US	8307

TITLE OF INVENTION: TEMPERATURE SENSITIVE INDICATOR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$720	\$300	\$0	\$1020	09/09/2008

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

**HOW TO REPLY TO THIS NOTICE:**

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

## PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to:** **Mail Stop ISSUE FEE**  
**Commissioner for Patents**  
**P.O. Box 1450**  
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**or Fax (571)-273-2885**

**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

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**TRASK BRITT**  
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Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

### **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)

(Signature)

(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,041	10/21/2005	Tatiana Maciulis Dip	3129-7506US	8307

**TITLE OF INVENTION: TEMPERATURE SENSITIVE INDICATOR**

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$720	\$300	\$0	\$1020	09/09/2008
EXAMINER	ART UNIT	CLASS-SUBCLASS				
SMITH, RICHARD A	2841	116-216000				

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
 "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list  
 (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 \_\_\_\_\_  
 2 \_\_\_\_\_  
 3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent):  Individual  Corporation or other private group entity  Government

4a. The following fee(s) are submitted:

- Issue Fee  
 Publication Fee (No small entity discount permitted)  
 Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- A check is enclosed.  
 Payment by credit card. Form PTO-2038 is attached.  
 The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.  b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

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This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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24247	7590	06/09/2008	EXAMINER			
TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110				SMITH, RICHARD A		
		ART UNIT		PAPER NUMBER		
				2841		
DATE MAILED: 06/09/2008						

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 31 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 31 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/554,041	DIP, TATIANA MACIULIS
	<b>Examiner</b>	<b>Art Unit</b>
	R. Alexander Smith	2841

-- **The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to the amendment filed on April 17, 2008.
2.  The allowed claim(s) is/are 1,45,53,55,56,66,73 and 80-157.
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All    b)  Some\*    c)  None    of the:
    1.  Certified copies of the priority documents have been received.
    2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_ .
    3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_ .
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_ .

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_ .
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_.

***Reasons for Allowance***

1. The following is an examiner's statement of reasons for allowance of claims 1, 45, 53, 55, 56, 66, 73 and 80-157.

For independent claim 1 the prior art of record does not disclose or clearly suggest a temperature sensitive indicator comprising:

an axially movable slidable piston to be assembled inside the tube forming a first compartment comprised between the piston and the closed end and a second compartment comprised between the piston and the open end;

a freezable fluid to be located in the second compartment inside the tube;

wherein the temperature sensitive indicator is activated when the releasable cap is released by the frost action of the freezable fluid inside the second compartment and the temperature sensitive indicator reveals the occurrence of the temperature increase in the environment in which the indicator is immersed, by the irreversible motion of the piston in a single direction inside the tube when the freezable fluid inside the second compartment thaws and flows out of the tube

in combination with the remaining limitations of the claim.

Claims 80-104 recite limitations which, in combination with allowed claim 1, render the dependent claims allowable.

For independent claim 45 the prior art of record does not disclose or clearly suggest an indicator for stock control, comprising:

a piston positioned inside the hollow tube, wherein the piston creates a first space between a first side of the piston and the open end and a second space between a second side of the piston and the closed end,

a first fluid in the first space; a force generating object in the second space; and

Art Unit: 2841

media associated with the hollow tube to provide at least one indication of the occurrence of a temperature rise in an ambient in which the indicator is immersed wherein the force generating object comprises a gaseous fluid

in combination with the remaining limitations of the claim.

For independent claim 53 the prior art of record does not disclose or clearly suggest an indicator for stock control, comprising:

a piston positioned inside the hollow tube, wherein the piston creates a first space between a first side of the piston and the open end and a second space between a second side of the piston and the closed end,

media associated with the hollow tube to provide at least one indication of the occurrence of a temperature rise in an ambient in which the indicator is immersed, further comprising movable laminar petals positioned within the hollow tube between the first space and the second space, said movable laminar petals exhibiting a closed position when the first fluid is in a frozen state within the first space

in combination with the remaining limitations of the claim.

Claims 55 and 56 recite limitations which, in combination with allowed claim 53, render the dependent claims allowable.

For independent claim 66 the prior art of record does not disclose or clearly suggest an indicator for stock control, comprising:

a hollow tube having an open end and a closed end;

a piston positioned inside the hollow tube, wherein the piston creates a first space between a first side of the piston and the open end and a second space between a second side of the piston and the closed end,

the piston having a circumference in contact with the hollow tube;

a first fluid in the first space; a force generating object in the second space; and

media associated with the hollow tube to provide at least one indication of the occurrence of a temperature rise in an ambient in which the indicator is immersed further comprising a feature for preventing movement of the first fluid in a frozen state within the first space, the feature selected from the group consisting of a ring-shaped concavity and a rib in combination with the remaining limitations of the claim.

For independent claim 73 the prior art of record does not disclose or clearly suggest an indicator comprising:

a spring attached to the moveable piston and the cap; and  
a fluid in the hollow elongated housing between the moveable piston and the cap, the fluid capable of being frozen;  
said indicator further comprising a hole in the closed end of the hollow elongated housing, the hole allowing air to flow into the hollow elongated housing as the moveable piston moves within the hollow elongated housing  
in combination with the remaining limitations of the claim.

For independent claim 105 the prior art of record does not disclose or clearly suggest a temperature sensitive indicator comprising:

an axially movable slidable piston to be assembled inside the tube forming a first compartment comprised between the piston and the closed end and a second compartment comprised between the piston and the open end;  
compressible means to be located inside the first compartment inside the tube;  
a freezable fluid to be located in the second compartment inside the tube;  
wherein the temperature sensitive indicator is activated when the releasable cap is partially released by the frost action of the freezable fluid inside the second compartment, and wherein the cap and the freezable fluid prevent the movement of the piston.  
in combination with the remaining limitations of the claim.

Claims 106-131 recite limitations which, in combination with allowed claim 105, render the dependent claims allowable.

For independent claim 132 the prior art of record does not disclose or clearly suggest a temperature sensitive indicator comprising

an axially movable slidable piston to be assembled inside the tube forming a first compartment comprised between the piston and the closed end and a second compartment comprised between the piston and the open end;

a freezable fluid to be located in the second compartment inside the tube;

wherein the temperature sensitive indicator is activated by the frost action of the freezable fluid inside the second compartment and the temperature sensitive indicator reveals the occurrence of the temperature increase in the environment in which the indicator is immersed by the irreversible motion of the piston in a single direction inside the tube when the freezable fluid inside the second compartment thaws and flows out the tube.

in combination with the remaining limitations of the claim.

Claims 133-155 recite limitations which, in combination with allowed claim 132, render the dependent claims allowable.

For independent claim 156 the prior art of record does not disclose or clearly suggest a method for monitoring frozen goods, comprising a temperature sensitive indicator within the vicinity of a frozen good to be monitored, an axially movable slidable piston to be assembled inside the tube forming a first compartment and a second compartment, a compressible means located inside the first compartment of the tube, a freezable fluid located in the second compartment of the tube and a releasable cap to cover the first open end of the tube; wherein the method for monitoring frozen goods comprises the steps of;

(ii) activating the indicator by the frost action of the freezable fluid inside the second compartment and releasing the releasable cap;

(iii) when the environmental temperature increases, forcing the thawed or thawing fluid to flow out of the tube, through a force exerted by the compressible means in combination with the remaining limitations of the claim.

Claim 157 recites limitations which, in combination with allowed claim 156, render the dependent claim allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. Alexander Smith whose telephone number is 571-272-2251. The examiner can normally be reached on Monday through Friday from 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean A. Reichard can be reached on 571-272-1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R.A.Smith/

June 5, 2008

R. Alexander Smith  
Primary Examiner Art Unit 2841